

CORRECTED VERSION

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
17 June 2004 (17.06.2004)

PCT

(10) International Publication Number
WO 2004/049823 A1

(51) International Patent Classification⁷: **A23L 1/0534, C08B 11/12, A23L 1/212, 2/02**

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:
PCT/EP2003/013682

(84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(22) International Filing Date: 1 December 2003 (01.12.2003)

Published:
— with international search report

(25) Filing Language: English

(48) Date of publication of this corrected version:
26 August 2004

(26) Publication Language: English

(15) Information about Correction:
see PCT Gazette No. 35/2004 of 26 August 2004, Section II

(30) Priority Data:
02080138.7 4 December 2002 (04.12.2002) EP

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(71) Applicant (*for all designated States except US*): **AKZO NOBEL N.V. [NL/NL]; Velperweg 76, NL-6824 BM Arnhem (NL).**

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **THEEUWEN, Conrardus, Hubertus, Joseph [NL/NL]; Conference 38, NL-6922 CE Duiven (NL). DIJK, Berend, Jan [NL/NL]; Speelkamp 3, NL-3831 PE Leusden (NL).**

(74) Agent: **SCHALKWIJK, Pieter, Cornelis; Akzo Nobel N.V., Intellectual Property Dept. (Dept. AIP), P.O. Box 9300, NL-6800 SB Arnhem (NL).**

WO 2004/049823 A1

(54) Title: USE OF CARBOXYMETHYL CELLULOSE (CMC) IN FRUIT-BASED PRODUCTS

(57) Abstract: The invention relates to the use of a carboxymethyl cellulose (CMC) for preparing fruit-based products, such as jams including low calory jam, fruit preserves, pie fillings, fruity sauces, fruity fillings in cookies, fruit-based toppings, or beverages, wherein the CMC is characterized by forming a gel at 25°C after high-shear dissolution in a 0.3 w% aqueous sodium chloride solution, the final content of the CMC in the aqueous sodium chloride solution being 1 wt% for a CMC having a degree of polymerization (DP) of >4,000, 1.5 wt% for a CMC having a DP of >3,000-4,000, 2 wt% for a CMC having a DP of 1,500-3,000, and 4 wt% for a CMC having a DP of >1,500, the gel being a fluid having a storage modulus (G') which exceeds the loss modulus (G'') over the entire frequency region of 0.01-10 Hz when measured on an oscillatory rheometer operating at a strain of 0.2. The CMC may also be used in combination with hydrocolloids such as carrageenan, starch, alginates, xanthan, konjac, or food protein.